

MILLCREEK TOWNSHIP SEWER AUTHORITY

MILLCREEK MUNICIPAL BUILDING
3608 WEST 26TH STREET
ERIE, PENNSYLVANIA 16506

Phone (814) 835-6721

Fax (814) 835-6615

August 13, 2004

Mr. Anthony C. Oprendeck, Compliance Specialist
Water Management
PA Dept. of Environmental Protection
230 Chestnut Street
Meadville PA 16335-3481

RE: Kearsarge Area Sanitary Sewer Overflows

Dear Mr. Oprendeck:

On July 16 and July 31, 2004 the Millcreek Township Operations Superintendent used his best judgment to prevent the flooding of basements and opened the Kearsarge bypass. Engineering Reports have been attached for documentation. Please note that on the July 31 event, the system was pumped at two other locations, 51st and Zimmerly and the Patton/Pershing areas. All calls for both events were made in a timely fashion.

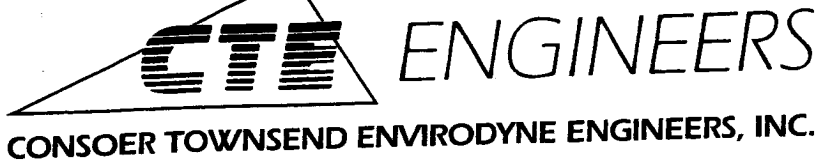
In accordance with the most recent COA, we have enclosed check # 110360 in the amount of \$2,500 for the July 16th event and \$7,500 for the July 31st event for a total of \$10,000, made payable to the "Commonwealth of Pennsylvania Clean Water Fund".

Very truly yours,
Millcreek Township Sewer Authority

By: _____
George W. Riedesel, P.E., Manager

Cc: Authority Board
Township Supervisors
William Steff, S.T.S.A.

MSA-MT 2985



155 West 8th Street

August 12, 2004

Erie, Pennsylvania

Millcreek Township Sewer Authority
3608 West 26th Street
Erie, PA 16506

Phone: (814) 453 4394

Re: July 16, 2004 Overflow Event
Kearsarge Pump Station

Fax: (814) 455 6596

Ladies/Gentlemen:

Please be advised that an overflow event occurred at the Kearsarge pump station on July 16, 2004. The writer was advised of said overflow at approximately 5:20 a.m. When I arrived at the station an hour later the bypass had been turned off.

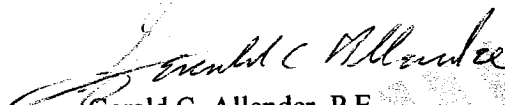
In conversations with Mr. Bridger he indicated that the bypass was opened for a total of seven minutes and had been opened seven turns. From the circular chart at 5:40 a.m., which would have been the period the bypass was opened, there was a discharge from the station of about 4,800 gpm. Based on previous and later events at 4,800 gpm, we anticipate approximately 1,500 gpm would have been discharging through the bypass with another 3,300 gpm passed forward to the Erie WWTP. Seven minutes at 1,500 gpm amounts to 10,500 gallons of wastewater bypass to Walnut Creek. Since we were not present for the actual event, the estimated flow forward is not dependent upon any knowledge of force main pressures and is based solely on past observations.

In interviewing Mr. Bridger, he indicated that the wet well level had risen approximately a foot above the lower landing prior to opening the bypass. That was confirmed by the water mark on the wall which was still quite evident at the time of our inspection.

There is little other information regarding this bypass at this time.

Very truly yours,

CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.


Gerald C. Allender, P.E.
Senior Associate

GCA:lb

MSA-MT 2986



155 West 8th Street

August 12, 2004

Erie, Pennsylvania

Millcreek Township Sewer Authority
3608 West 26th Street
Erie, PA 16506

Phone: (814) 453 4394

Attn: George Riedesel, Manager

Fax: (814) 455 6596

Ladies/Gentlemen:

On Saturday, July 31, 2004, there was an overflow at the Kearsarge pump station with a total duration of 15 hours and 37 minutes. The rainfall on July 31st was preceded by approximately .5-inch rain from 3:00 p.m. until 11:00 p.m. on July 30th. From 11:00 p.m. to 5:30 a.m. on July 31st another 2-inches of rainfall fell, most of it during two one-hour periods, the last period ending around 5:00 a.m. The first overflow began at 5:15 a.m. with the wet well level above the third landing up. It continued until about 1:22 p.m. at which time the bypass was shutoff until a third storm caused flows to again increase and the bypass was reopened at 7:00 p.m. on July 31st and was finally shut off at 2:30 a.m. on August 1st.

During the period of 5:30 a.m., July 31st until 3:00 p.m., approximately ½-inch rain had fallen, but between 3:00 p.m. and 6:00 p.m. there was another major rain event between 5:00 and 6:00 when another 1-1/4-inch fell (this storm was localized and radar showed it followed Interstate 90 and did not impact the lake plain). Intensities as high as 2-inches/hr. were indicated at some locations south of the Interstate. During the latter overflow event there was only an additional 1/8-inch of rainfall.

The pump flow was monitored throughout the period as was the pressure on the discharge side of the pipe which is used to estimate the amount of the flow going forward to the Erie WWTP. Flow going forward averaged between 3,400 gpm and 3,100 gpm. Flows pumped during the overflow periods ranged as high as 6,200 gpm after correction for the instrument error. The enclosed figure indicates the total flow pumped, the amount pumped forward, the amount overflowed, and the cumulative overflow amounts. The flow bypassed is equal to flow pumped minus flow sent forward to Erie. The cumulative total by the end of the bypass equaled 1.8 MG based on corrected observed flows. Although we are still assessing the accuracy of the

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Millcreek Township Sewer Authority
August 12, 2004
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information, this value will not be any larger. It is conceivable that it could be somewhat less (150,000 gallons). We will not have that information for approximately one week.

During the later storm rainfall event, sewers tributary to the Kearsarge pump stations surcharged along Zimmerly Road and along Pershing Road. This caused the need to set up bypass pumping in two manholes in addition to the overflow at the pump station. The overflow at 56nd and Zimmerly operated between 7:45 p.m. and 9:55 p.m. at a rate of 450 gpm which equaled a total volume of 58,500 gallons. The bypass at Pershing was accomplished using a 150 gpm pump. It was in operation from 8:50 p.m. to 11:00 p.m. and the total volume pumped is estimated at 19,500 gallons.

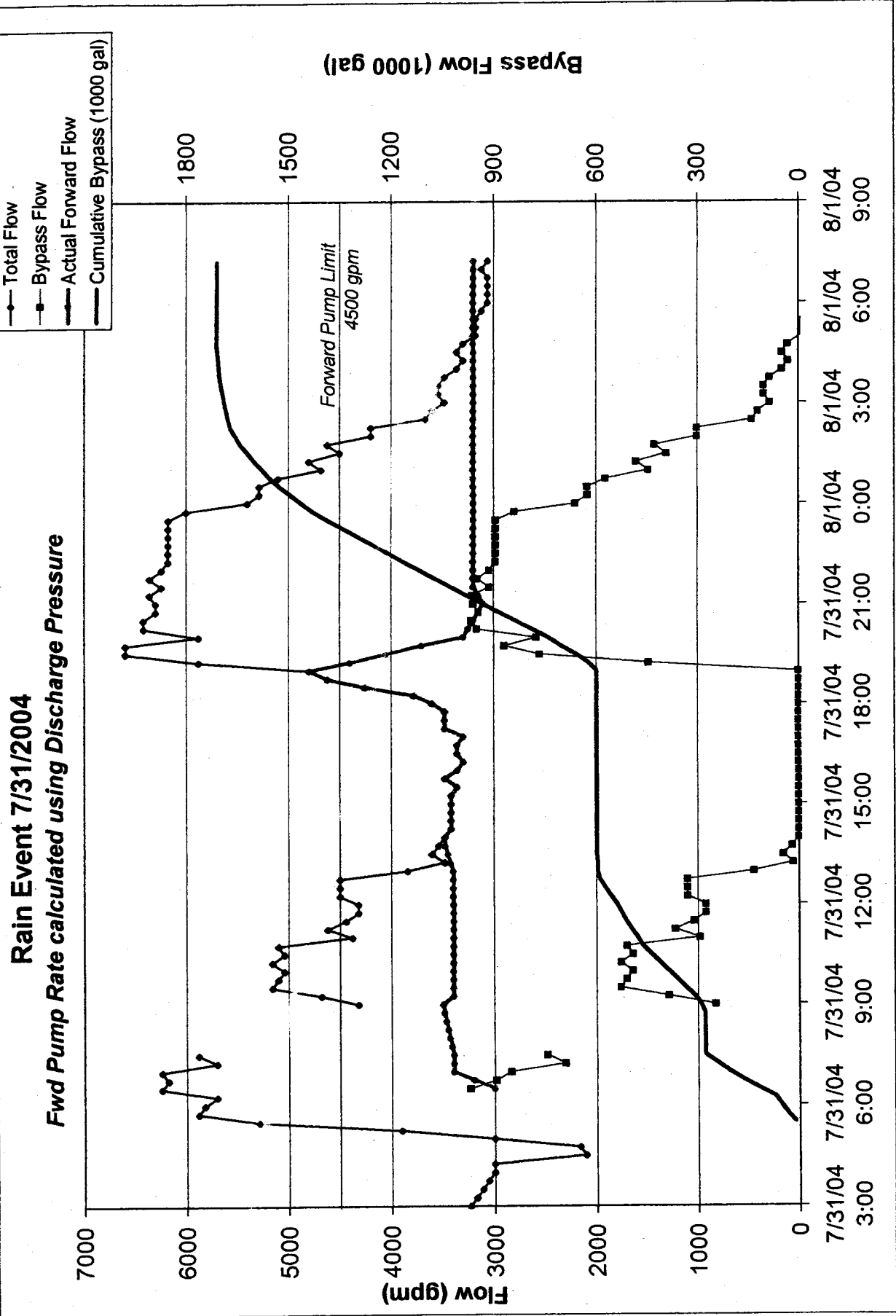
This concludes our assessment of the overflow event. Once we have confirmed the actual pumping rate to the best of our ability, we will provide any corrections. We are faced with the problem that two influent meters found in the tributary sewers were out of operation for a good portion of the storm, particularly the later one. We are attempting to reconstruct that data.

Very truly yours,

CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.

Gerald C. Allender, P.E.
Senior Associate

GCA:lb





155 West 8th Street

August 12, 2004

Erie, Pennsylvania

Millcreek Township Sewer Authority
3608 West 26th Street
Erie, PA 16506

Phone: (814) 453 4394

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Millcreek Township Sewer Authority
August 12, 2004
Page 2

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During the later storm rainfall event, sewers tributary to the Kearsarge pump stations surcharged along Zimmerly Road and along Pershing Road. This caused the need to set up bypass pumping in two manholes in addition to the overflow at the pump station. The overflow at 56nd and Zimmerly operated between 7:45 p.m. and 9:55 p.m. at a rate of 450 gpm which equaled a total volume of 58,500 gallons. The bypass at Pershing was accomplished using a 150 gpm pump. It was in operation from 8:50 p.m. to 11:00 p.m. and the total volume pumped is estimated at 19,500 gallons.

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